

Application No. 09/909,288
Amdt. Date December 12, 2003
Reply to Official Action (Paper No. 10) of October 10, 2003

REMARKS/ARGUMENTS

Status Of The Claims

The Official Action dated October 7, 2003, has been carefully considered. Accordingly, the changes presented herewith, taken with the following remarks, are believed sufficient to place the present invention in better condition for consideration on Appeal. Reconsideration and allowance of all remaining claims is respectfully requested.

Claim 3 was previously canceled. In the present amendment, Claims 1, 4, 9, and 13 have been amended, all of which amendments find support in the specification as filed. Claim 8 has been canceled without prejudice. Claims 1-2, 4-7, 9-29, and 36-37 remain in the application for consideration.

Formal Matters

Under 35 U.S.C. § 119(b) the Examiner has acknowledged receipt of certified copies of references PCT/US00/34907, PCT/US00/34906, PCT/US00/20255 and PCT/US00/19619 of which Applicants claim priority to in this application.

In the Official Action, the Examiner has withdrawn rejection of Claims 14-19 and 22-27 under 35 U.S.C. § 112, second paragraph. For the record, there are no further objections or rejections under §112 outstanding

Rejections Under 35 U.S.C. § 103(a)

- A. Claims 1-18, 20-28, and 37 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Culshaw et al U.S. Patent 5,202,050 (hereinafter referred to as "Culshaw et al") in view of Japanese reference JP 8-151597 (hereinafter referred to as "JP '597").

The Examiner asserted that Culshaw et al disclose hard surface cleaning compositions which contain a binary mixture of an organic solvent and a narrowly defined chelating agent with a pH of generally in the range of from 5 to 11, but that Culshaw et al fail to teach adding particles of smectite clay having a platelet size of less than 100 nm or a cleaning composition having the specific physical parameters containing a soil swelling agent, a smectite clay with a particle size of less than 100 nm, and other requisite components of the composition recited in the claims. The Examiner also asserted that the broad teachings of Culshaw et al would encompass compositions having the same flow viscosity, shear thinning properties, and other physical parameters as set forth by the claims. The Examiner further alleged that the deficiencies of Culshaw et al are taught by JP '597, which the Examiner asserted discloses a liquid detergent composition containing a clay mineral having an average particle diameter of 10 to 5000 nm and anionic and nonionic

Application No. 09/909,288

Amdt. Date December 12, 2003

R ply to Official Action (Paper No. 10) of October 10, 2003

surfactants.

However, as will be set forth in detail below, it is submitted that the hard surface cleaning compositions as defined by Claims 1-2, 4-7, 9-18, 20-29 and 36-37 are non-obvious over and patentably distinguishable from Culshaw et al in view of JP '597. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

The hard surface cleaning compositions defined by independent Claims 1, 4 and 9 are advantageous in that they sufficiently low viscosity to allow application by spraying, while they also exhibit sufficiently low flow velocity to avoid runoff from surfaces to which they are applied. This cleaning composition comprises the combination of a soil swelling agent and a thickening system, and has a pH, as measured in a 10% solution in distilled water, from greater than 11 to about 14.

It is well settled that to support a rejection under 35 U.S.C. § 103, a reference must provide an enabling disclosure, i.e., it must place the claimed invention in the possession of the public. *In re Payne*, 203 U.S.P.Q. 245 (CCPA 1979). The combination of Culshaw et al and JP '597 does not result in the hard surface cleaning composition of Claims 1-2, 4-7, 9-18, 20-29 and 36-37.

Culshaw et al disclose a cleaning composition containing a binary mixture of an organic solvent and a narrowly defined organic chelating agent, and a pH from about 5 to about 11 (col. 7, lines 53-55). Applicants find no teaching, suggestion or motivation relating to hard surface cleaning compositions comprising a soil swelling agent in combination with a thickening system, having a pH, as measured in a 10% solution in distilled water, from greater than 11 to about 14, as defined in Claims 1, 4 and 9, in Culshaw et al.

JP '597 discloses a liquid detergent composition containing a clay mineral having an average particle diameter of 10 to 5000 nm and anionic and nonionic surfactants. The deficiencies of Culshaw et al with respect to the pH limitations are not resolved by JP '597. Moreover, Culshaw et al in combination with JP '597 does not render the limitations of Claims 1-2, 4-7, 9-18, 20-29 and 36-37 obvious as well. Rather, there is a teaching away from the claimed pH range. Culshaw et al teach a pH from about 5 to about 11, while JP '597 mentions a pH range from 5-6 (see JP '597 page 3, paragraph 0014, lines 44-45), each of which lies outside the pH range of the present claims.

Obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, 642 F.2d 413, 425, 208 U.S.P.Q. 871, 881 (CCPA 1981). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys., Inc. v. Montefiore Hosp. et al*, 732 F.2d 1572, 1577, 221 U.S.P.Q. 929, 933 (Fed. Cir. 1984). And "teachings of references can be combined only if there is some suggestion or

Application No. 09/909,288

Amdt. Date December 12, 2003

Reply to Official Action (Paper No. 10) of October 10, 2003

incentive to do so." *Id.* Therefor , "when determining the patentability of a claimed invention which combines two known elements, 'the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *In re Beattie*, 974 F.2d 1309, 1311-12, 24 U.S.P.Q.2d (BNA) 1040, 1042 (Fed. Cir. 1992) (quoting *Lindemann*, 730 F.2d at 1462, 221 U.S.P.Q. (BNA) at 488). Since Culshaw et al and JP '597 do not teach or suggest a composition having a pH, as measured in a 10% solution in distilled water, from greater than 11 to about 14, as defined by Claim 1, there can be no expectation of success. As such, Culshaw et al in view of JP '597 does not render Claims 1, 4, and/or 9, and their dependent claims, obvious.

It is therefore submitted that the cleaning compositions as defined by Claims 1-2, 4-7, 9-18, 20-29, and 36-37 are non-obvious over and patentably distinguishable from Culshaw et al in combination with JP '597 and the rejection of Claims 1-18, 20-28, and 37 under 35 U.S.C. § 103(a) has been overcome. Reconsideration is respectfully requested.

- B. Claims 1-28 were rejected under 35 U.S.C. § 103(a) as being unpatentable over the Feng U.S. Patent 5,929,007 (hereinafter referred to as "Feng") in view of Culshaw et al and JP '597.

The Examiner asserted that Feng discloses an aqueous hard surface cleaning composition wherein the composition includes an amine oxide, chelating agent, caustic component, and a glycol ether solvent system having one glycol ether or glycol ether acetate solvent. The Examiner also asserted that the broad teachings of Feng in combination with Culshaw et al and JP '597 would encompass compositions having the same flow viscosity, shear thinning properties, and other physical parameters as set forth by the Claims. The Examiner further alleged that the deficiencies of Feng are taught by JP '597, asserting that JP '597 discloses a liquid detergent composition containing a clay mineral having an average particle diameter of 10 to 5000 nm and anionic and nonionic surfactants.

However, as will be set forth in detail below, it is submitted that the hard surface cleaning compositions as defined by Claims 1-2, 4-7, 9-18, 20-29, and 36-37 are non-obvious over and patentably distinguishable from Feng in view of Culshaw et al and JP '597. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

The Applicants bring to the Examiner's attention that when prior-art references require a selective combination to render obvious a subsequent invention, there must be some reason for the combination other than the hindsight-gleaned from the invention itself. *Uniroyal Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 5 U.S.P.Q.2d 1434 (Fed. Cir. 1988). In other words, the invention must have been obvious at the time it was made; the Examiner cannot use hindsight to

Application No. 09/909,288

Amdt. Date December 12, 2003

Reply to Official Action (Paper No. 10) of October 10, 2003

reconstruct the invention from the prior art and say the invention was obvious, *W.L. Gore*, 721 F.2d at 1553. To establish prima facie obviousness of the claimed invention, all the claim limitations must be taught or suggested by the prior art, *In re Royka*, 490 F.2d 981, 180 U.S.P.Q. 580 (CCPA 1974). As recited above, obviousness is tested by "what the combined teachings of the references would have suggested to those of ordinary skill in the art." *In re Keller*, supra; see also *Leinoff v. Louis Milona & Sons Inc.*, 726 F.2d 734, 739 (Fed. Cir. 1984). But it "cannot be established by combining the teachings of the prior art to produce the claimed invention, absent some teaching or suggestion supporting the combination." *ACS Hosp. Sys., Inc. v. Montefiore Hosp. et al*, supra; see also *Carella*, 804 F.2d at 140. And "teachings of references can be combined only if there is some suggestion or incentive to do so." *Id.* Therefore, "when determining the patentability of a claimed invention which combines two known elements, 'the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.'" *In re Beattie*.

As noted above, the Examiner admits that Feng fails to teach a cleaning composition having particles with a platelet size of less than 100 nm or a cleaning composition having the specific physical parameters containing a soil swelling agent, a smectite clay with a particle size of less than 100 nm, and other requisite components of the composition, as recited in the claims. In fact, Feng teaches alkaline cleaning compositions having an overall pH at least about 11.5 or greater. The pH of Feng's preferred embodiment is desirably "about 13 and higher" (col. 3, lines 52-55).

The courts have ruled in the case of *W.L. Gore & Associates, Inc. v. Garlock, Inc.* 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984) that a prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. The deficiencies of Feng, with respect to Claims 1-2, 4-7, 9-18, 20-29, and 36-37, are not resolved by either Culshaw et al or JP '597. The Feng composition requires a 0.01-2.5% of a caustic component (col. 2, line 7), preferably sodium hydroxide (col. 4, lines 1-2). There is no such caustic component requirement in the any of the compositions of Culshaw et al or JP '597. Rather, Culshaw et al and JP '597 appear to be teaching away from highly alkaline cleaning compositions by disclosing a specific pH range or as a result of their silence as to the acceptability of a highly alkaline pH or the presence of alkalinizing agents. Specifically, there is no motivation in Culshaw et al or JP '597 to direct one skilled in the art to prepare cleaning compositions having a highly alkaline pH (i.e. greater than 11.5) using particles having a platelet size of less than 100 nm or a cleaning composition having the specific physical parameters containing a soil swelling agent, a smectite clay with a particle size of less than 100 nm, and other requisite components of the composition, as asserted by the Examiner. Thus, considering the entirety of Culshaw and JP '597, one skilled in the art would not look to reference

Application No. 09/909,288
Amdt. Date December 12, 2003
Reply to Official Action (Paper No. 10) of October 10, 2003

combinations that are absent motivation to use pH ranges that do not overlap with Feng in preparing a cleaning composition according to the present claims.

By picking and choosing among individual elements of assorted parts of references, the Applicants submit that the Examiner has used hindsight to reconstruct the invention. Since, there is no motivation, suggestion or teaching in Feng, alone or in combination with Culshaw et al, or JP '597, of the desirability of practicing their inventions outside the disclosed pH range, there can be no expectation of success. Thus, the Applicants do not believe that Feng in view of Culshaw et al and JP '597 renders independent Claims 1, 4, and/or 9, and their dependent claims, obvious.

It is therefore submitted that the cleaning compositions as defined by Claims 1-2, 4-7, 9-18, 20-29, and 36-37 are non-obvious over and patentably distinguishable from Feng in combination with Culshaw et al and JP '597, and the rejection of Claims 1-28 under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

- C. Claim 29 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Culshaw et al in view of JP '597 or Feng in view of Culshaw et al and JP '597 as applied to the rejection of Claim 1, from which Claim 29 depends, and further in view of the Ofosu-Asante U.S. Patent 5,739,092 (hereinafter referred to as "Ofosu-Asante").

The Examiner admitted that none of the previously cited references taught the use of a divalent cation in addition to the other requisite components of the composition as recited in Claim 29. The Examiner relied on Ofosu-Asante as teaching a liquid or gel dishwashing detergent composition containing alkyl ethoxy carboxylate surfactant and calcium or magnesium ions, and that the presence of such calcium or magnesium ions can improve the cleaning of greasy soils for compositions, manifest mildness to the skin, and provide good storage stability.

However, as will be set forth in detail below, it is submitted that the hard surface cleaning composition as defined by Claim 29 is non-obvious over and patentably distinguishable from Culshaw et al, Feng and JP '597 in view of Ofosu-Asante. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

The deficiencies of Culshaw et al, Feng and JP '597 are not resolved by Ofosu-Asante. Moreover, Culshaw et al, Feng and JP '597 in combination with Ofosu-Asante do not render the limitations of Claim 29 obvious. Ofosu-Asante broadly discloses a light-duty dishwashing detergent composition generally having a alkyl ethoxy surfactant, calcium or magnesium ions, and an alkylpolyethoxypolycarboxylate surfactant (col. 6, lines 60-65), having a pH range of from 7 to 11 (col. 5, lines 41-49), with a preferred pH range from 8.5 to 9.5. Ofosu-Asante caution that "at the upper pH range, i.e. between about 10 and 11, compositions containing magnesium ions readily form hydroxide precipitates" (col. 6, lines 62-65; see also col. 7, lines 1-4). Thus, there is

Application No. 09/909,288

Amdt. Date December 12, 2003

Reply to Official Action (Paper No. 10) of October 10, 2003

a teaching away from the claimed pH range. Though the Applicants' composition may contain alkylpolyethoxypolycarboxylate surfactant and divalent cations, the Examiner cannot pick and choose among individual elements of assorted parts of references to recreate the claimed invention. The Examiner has some burden to show some teaching or suggestion in references and to support their use in the particular claimed combinations. *Smith-Kline Diagnostics, Inc. v. Helena Laboratories, Corp.*, 8 U.S.P.Q.2d 1468, 1475 (Fed. Cir. 1988) (citation omitted). The Applicants find no teaching or suggestion in any of these references relating to hard surface cleaning compositions, having a pH, as measured in a 10% solution in distilled water, from greater than 11 to about 14, comprising a soil swelling agent, thickening system and a divalent cation as defined by Claim 29.

Since, there is no motivation, suggestion or teaching in Feng, Culshaw et al, JP '597, or Ofosu-Asante, alone or in combination, of the desirability of practicing their inventions outside the disclosed pH range, there can be no expectation of success. It is therefore submitted that the cleaning compositions as defined by Claim 29 are non-obvious over and patentably distinguishable from Culshaw et al, Feng and JP '597 in combination with Ofosu-Asante and the rejection of Claim 29 under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

D. Claim 36 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Culshaw et al in view of JP '597 or Feng in view of Culshaw et al and JP '597 as applied to previous claims, and further in view of WO 99/19441 (hereinafter referred to as "WO '441").

The Examiner relied on his earlier assertions regarding the disclosures of Culshaw et al and Feng, and asserted that WO '441 teaches a cleaning and disinfecting composition which provides effective cleaning, disinfecting and shine performance, where the composition comprises a surfactant system and antimicrobial compounds and/or a peroxygen bleach. Furthermore, the Examiner alleged that WO '441 further discloses a composition which may be packaged in a spray dispenser, preferably a spray dispenser with a trigger.

However, as will be set forth in detail below, it is submitted that the hard surface cleaning product as defined by Claim 36 is non-obvious over and patentably distinguishable from Culshaw et al, Feng and JP '597 in view of WO '441. Accordingly, this rejection is traversed and reconsideration is respectfully requested.

WO '441 also discloses that pH values for the compositions taught in WO '441 are less than 9 (See examples in WO '441). The deficiencies of Culshaw et al, Feng and JP '597 are not resolved by WO '441. Moreover, Culshaw et al, Feng and JP '597 in combination with WO '441 do not render the limitations of Claim 36 obvious. Applicants find no teaching or suggestion by

Application No. 09/909,288
Amdt. Date December 12, 2003
Reply to Official Action (Paper No. 10) of October 10, 2003

these references relating to hard surface cleaning products having a composition with a soil swelling agent and thickening system, having a pH, as measured in a 10% solution in distilled water, from greater than 11 to about 14, and a spray dispenser as defined by Claim 36. Rather, Culshaw et al, Feng and JP '597 merely teach methods and compositions for cleaning, while WO '441 discloses a broad combination of surfactants for the surfactant system. The combination of these references fails to teach or suggest a cleaning composition as set forth in Claim 36, particularly where the composition provides a combination of good sprayability and cling, when applied to soiled surfaces.

As noted above, the Examiner cannot pick and choose among individual elements of assorted parts of references to recreate the claimed invention, the Examiner has some burden to show some teaching or suggestion in references and to support their use in the particular claimed combinations. *Smith-Kline Diagnostics, Inc. v. Helena Laboratories, Corp.*, supra. As such, the combination of any of these references fails to teach or suggest a cleaning composition as set forth in Claim 36.

It is therefore submitted that the cleaning products as defined by Claim 36 are non-obvious over and patentably distinguishable from Culshaw et al, Feng and JP '597 in combination with WO '441 and the rejection of Claim 36 under 35 U.S.C. § 103 has been overcome. Reconsideration is respectfully requested.

- E. Claims 1-29 and 36 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over Claims 14-23 and 32-37 of U.S. Patent Application Serial No. 10/253,113, Claims 31-32 of U.S. Patent Application Serial No. 09/909,233, Claims 22-23 of U.S. Patent Application Serial No. 10/109,344, Claim 77 of U.S. Patent Application Serial No. 09/909,403 and Claim 80 of U.S. Patent Application Serial No. 09/910,281.

Due to the provisional nature of these rejections, Applicants traverse, and respectfully request reconsideration.

CONCLUSION

It is believed that the above amendments and remarks represent a complete response to the Examiner's rejections under 35 U.S.C. § 103, placing the present application in condition for allowance. Reconsideration and an early allowance are requested.

Respectfully submitted,

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Application No. 09/909,288

Amdt. Date December 12, 2003

Reply to Official Action (Paper No. 10) of October 10, 2003

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